

CASE REPORTS

- **Nasal Myiasis Caused by the Primary Screw-Worm, *Callitroga hominivorax* (Coquerel)**
- **Surgical Correction of Flexion Deformity of the Cervical Spine**

Nasal Myiasis Caused by the Primary Screw-Worm, *Callitroga hominivorax* (Coquerel)

DEANE P. FURMAN, Ph.D., Berkeley

SPECIMENS OF A LARVA which proved to be *Callitroga hominivorax* were forwarded to the author for identification in 1953. These had been collected in the summer of 1952 from a resident of Lone Pine, Inyo County, who had not been out of the vicinity of his home during the period involved.

REPORT OF A CASE

While the patient was reading in his yard a persistent fly buzzed about his nose. He struck at it several times but it was "like a streak of lightning," as he later described it. The fly disappeared, but shortly thereafter a sense of nasal irritation caused the patient to blow his nose. A fly was discharged. During the next two days he experienced slight nasal discomfort with bleeding from one nostril. A physician who examined him then noted no abnormality, but two days later one side of the patient's face was swollen and inflamed. The nasal passages were irrigated and about 25 maggots were removed. Irrigation was then carried out daily for 11 days and about 200 maggots were removed. The patient then completely recovered.

DISCUSSION

This case, apparently the first verified report of human nasal myiasis in California due to *Callitroga hominivorax*, is rather similar to one described from Kansas by Herms.¹ In that case, however, the patient died as a result of the attack. As early symptoms may be obscure and the tiny first-stage maggots easily overlooked, the possibility of myiasis during the warm months should be borne in mind.

The primary screw-worm is known as one of the most dangerous myiasis-producing flies of the Americas. The parasite must infest the living tissues of a warm-blooded animal in order to complete its life cycle. Normally the adult female fly is attracted to fresh wounds upon which to oviposit. Within a few hours the eggs hatch and the tiny larvae immediately begin to burrow and feed on living tissue, causing increasingly severe injury as they grow. After about one week the mature maggots drop to the ground and burrow in soil to pupate. Within one week to two months, depending on the temperature, the adult flies emerge from pupation.

From the Department of Entomology and Parasitology, College of Agriculture, University of California.

In the United States the primary screw-worm survives throughout the year normally only in the southernmost parts, mainly in southern Florida and Texas. From these sites the flies migrate or are transported as maggots in infested animals to other parts of the country during the warm seasons. During mild winters the flies may overwinter in areas outside their usual range, as in California. A report by Laake³ indicated that at least three counties in Southern California were infested throughout the year 1950. In all probability this is not an unusual occurrence.

The fly causes tremendous loss of livestock, since untreated animals frequently die of infestation. As indicated by James,² man is also often attacked in infested areas.

Acknowledgment

The author acknowledges with appreciation the cooperation of Mr. Fred L. Jones, assistant game manager of the California Department of Fish and Game, who forwarded the specimens for identification and supplied information regarding the patient, and of Dr. Maurice T. James of the State College of Washington, who verified identification of the specimens.

REFERENCES

1. Herms, W. B.: Medical Entomology, pp. 381-2. The Macmillan Co., New York, 1950.
2. James, M. T.: The Flies That Cause Myiasis in Man, U. S. Dept. Agric. Misc. Pub., 631, pp. 1-175, 1947.
3. Laake, E. W.: Screw-worm Survey in Western United States, 1950, U. S. Dept. Agric. Bur. Ent. and Plant Quarantine Insect Pest Survey, Special Supplement No. 6, pp. 1-7, 1951.

Surgical Correction of Flexion Deformity of the Cervical Spine

CHRISTOPHER MASON, M.D., LEWIS COZEN, M.D., and LEO ADELSTEIN, M.D., Los Angeles

SMITH-PETERSEN, LARSON AND AUFRANC⁴ in 1945 reported five cases in which flexion of the spine was improved by osteotomy of the lumbar spine. La Chapelle³ reported a similar case but he performed the correction in two stages. Briggs, Keats and Schlesinger¹ improved the deformity by one-stage osteotomy of the lumbar spine. Jones² performed osteotomy of the cervical spine in an unreported case.

In the case herein reported upon the deformity was of the neck, not of the dorsal spine.

REPORT OF A CASE

In 1939 a man, then 30 years of age, first noted pain in the neck. Flexion deformity of the cervical spine developed